

**WHAT IS CLAIMED IS:**

1. A method of controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots, each slot having a plurality of data bits, and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

10 checking for errors in the data packet in a received time slot if the received power is greater than the first threshold; and

transmitting a signal requesting termination of retransmission of the data packet to the AN if no errors are found in the data packet after said checking.

15 2. The method of claim 1, further comprising the steps of:

determining whether it is a low data rate using a length of a preamble of the received data packet; and

proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same packet

20 two times or more.

3. The method of claim 1, further comprising the steps of:

determining a data rate corresponding to the received power if errors are found in the data packet in the error check; and

25 requesting retransmission of the data packet by transmitting the determined data rate to the AN.

4. The method of claim 1, further comprising the steps of:

determining a data rate corresponding to the received power if the

received power is equal to or less than the first threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

- 5           5.       The method of claim 1, further comprising the steps of:  
               comparing the received power with a predetermined second threshold if  
               the received power is equal to or less than the first threshold; and  
               transmitting the signal requesting termination of retransmission of the  
               data packet to the AN if the received power is less than the second threshold.

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6.       The method of claim 5, further comprising the steps of:  
               determining the data rate corresponding to the received power if the  
               received power is equal to or greater than the second threshold; and  
               requesting retransmission of the data packet by transmitting the  
 15       determined data rate to the AN.

7.       The method of any of claims 1,4 or 5, wherein the first threshold  
               is calculated by accumulating a C/I corresponding to the data rate of the current  
               data packet as many times as the maximum number of the data packet  
 20       transmissions.

8.       The method as claimed in either of claims 5 or 6, wherein the second  
               threshold is calculated by dividing the required C/I corresponding to a current  
               data rate by a predetermined margin and multiplying the number of already  
 25       transmitted slots for the current data packet.

9.       A method of controlling transmission of a data packet from an  
               access network (AN) in an access terminal (AT) of a mobile telecommunication  
               system where the AN transmits the data packet in successive time slots each

having a plurality of data bits and the AT receives the data packet from the AN [],  
the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN  
with a predetermined first threshold; and

- 5 transmitting a signal requesting termination of retransmission of the data  
packet to the AN if the received power is greater than the first threshold.

10. The method of claim 9, further comprising the steps of:

- determining whether it is a low data rate using a length of a preamble of  
10 the received data packet; and

proceeding further with the comparison step if the determined data rate is  
the low data rate, wherein the low data rate repeatedly transmits the same packet  
two times or more.

- 15 11. The method of claim 9, further comprising the steps of:

determining a data rate corresponding to the received power if the  
received power is equal to or less than the first threshold; and

requesting retransmission of the data packet by transmitting the  
determined data rate to the AN.

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12. The method of claim 11, further comprising the steps of:

comparing the received power with a predetermined second threshold if  
the received power is equal to or less than the first threshold; and

- transmitting the signal requesting termination of retransmission of the  
25 data packet to the AN if the received power is less than the second threshold.

13. The method of claim 12, further comprising the steps of:

determining the data rate corresponding to the received power if the  
received power is equal to or greater than the second threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

14. The method of any of claims 9 to 13, wherein the first threshold  
5 can be calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

15. The method as claimed in either of claims 12 or 13, wherein the  
10 second threshold is calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

16. A method of controlling transmission of a data packet from an  
15 access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN  
20 with a predetermined threshold; and

transmitting a signal requesting termination of retransmission of the data packet to the AN if the received power is less than the threshold.

17. The method of claim 16, further comprising the steps of:  
25 determining whether it is a low data rate using a length of a preamble of the received data packet; and

Proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

18. The method of claim 16, wherein the threshold is calculated by multiplying a received C/I corresponding to a current data rate by the maximum number of data packet transmissions, subtracting a predetermined margin from the product, and multiplying the difference by a ratio of the number of already  
5 transmitted slots to the total number of slots transmittable for the data packet.

19. A method of controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each  
10 having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

determining a data rate corresponding to the received power if the  
15 received power is less than or equal to the first threshold; and

requesting retransmission of the data packet to the AN by transmitting the determined data rate to the AN.

20. The method of claim 19, further comprising the steps of:  
20 determining whether it is a low data rate using a length of a preamble of the received data packet; and

proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

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21. The method of claim 19, further comprising the steps of:

comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold;

determining the data rate corresponding to the received power if the

received power is equal to or greater than the second threshold; and

requesting retransmission of the data packet by transmitting the determined data rate to the AN.

- 5           22.     The method of any of claims 19 to 21, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

23.     The method of claim 21, wherein the second threshold is  
10 calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

24.     A method of controlling transmission of a data packet from an  
15 access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising the steps of:

- comparing a received C/I of a forward pilot signal received from the AN  
20 with a predetermined first threshold; and

            requesting retransmission of the data packet by transmitting a determined data rate to the AN if the received power is equal to or less than the first threshold.

- 25           25.     The method of claim 24, further comprising the steps of:  
            determining whether it is a low data rate using a length of a preamble of the received data packet; and  
            proceeding further with the comparison step if the determined data rate is the low data rate, wherein the low data rate repeatedly transmits the same data

packet two times or more.

26. The method of claim 24, further comprising the steps of:  
 comparing the received power with a predetermined second threshold if  
 5 the received power is equal to or less than the first threshold; and  
 requesting retransmission of the data packet to the AN if the received  
 power is equal to or greater than the second threshold.

27. The method of any of claims 24 to 26, wherein the first threshold  
 10 is calculated by accumulating a C/I corresponding to the data rate of the current  
 data packet as many times as the maximum number of data packet transmissions.

28. The method of claim 26, wherein the second threshold is  
 calculated by dividing the required C/I corresponding to a current data rate by a  
 15 predetermined margin and multiplying the number of already transmitted slots  
 for the current data packet.

29. An apparatus for controlling transmission of a data packet from  
 an access network (AN) in an access terminal (AT) of a mobile  
 20 telecommunication system where the AN transmits the data packet in successive  
 time slots each having a plurality of data bits and the AT receives the data packet  
 from the AN, the apparatus comprising:

a device for comparing a C/I of a forward pilot signal received from the  
 AN with a predetermined first threshold;  
 25 a device for decoding a data packet in a received time slot and checking  
 for errors in the decoded data packet if the received power is greater than the first  
 threshold; and

a device for transmitting a signal requesting termination of  
 retransmission of the data packet to the AN if no errors are found in the data

packet.

30. The apparatus of claim 29, wherein the comparator detects the length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

31. The apparatus of claim 29, further comprising:  
 10 a device for determining a data rate corresponding to the received power if errors are found in the decoded data packet; and  
 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

32. The apparatus of claim 31, further comprising:  
 15 a device for determining a data rate corresponding to the received power if the received power is equal to or less than the first threshold; and  
 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

20 33. The apparatus of claim 31, further comprising:  
 a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold; and  
 a device for transmitting the signal requesting termination of retransmission of the data packet to the AN if the received power is less than the second threshold.

34. The apparatus of claim 33, further comprising:  
 a device for determining the data rate corresponding to the received



power if the received power is equal to or greater than the second threshold; and  
 a device for requesting retransmission of the data packet by transmitting  
 the determined data rate to the AN.

5           35.    The apparatus of any of claims 29 to 34, wherein the first  
 threshold is calculated by accumulating a C/I corresponding to the data rate of  
 the current data packet as many times as the maximum number of data packet  
 transmissions.

10           36.    The apparatus as claimed in either of claims 33 or 34, wherein the  
 second threshold is calculated by dividing the required C/I corresponding to a  
 current data rate by a predetermined margin and multiplying the number of  
 already transmitted slots for the current data packet.

15           37.    An apparatus for controlling transmission of a data packet from  
 an access network (AN) in an access terminal (AT) of a mobile  
 telecommunication system where the AN transmits the data packet in successive  
 time slots each having a plurality of data bits and the AT receives the data packet  
 from the AN, the apparatus comprising:

20           a device for comparing a received C/I of a forward pilot signal received  
 from the AN with a predetermined first threshold; and

            a device for transmitting a signal requesting termination of  
 retransmission of the data packet to the AN if the received power is greater than  
 the first threshold.

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            38.    The apparatus of claim 37, wherein the comparator detects the  
 length of the data preamble of the received time slot, determines whether that is  
 the low data rate and performs the comparison if the determined data rate is a low  
 data rate, wherein the low data rate repeatedly transmits the same data packet two

times or more.

39. The apparatus of claim 37, further comprising:

a device for determining a data rate corresponding to the received power if the received power is equal to or less than the first threshold; and

5 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

40. The apparatus of claim 37, further comprising:

a device for comparing the received power with a predetermined second  
10 threshold if the received power is equal to or less than the first threshold; and

a device for transmitting the signal requesting termination of retransmission of the data packet to the AN if the received power is less than the second threshold.

15 41. The apparatus of claim 40, further comprising:

a device for determining a data rate corresponding to the received power if the received power is equal to or greater than the second threshold; and

a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

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42. The apparatus of any of claims 37 to 41, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet transmissions.

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43. The apparatus as claimed in either of claims 40 or 41, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots for the current data packet.

44. An apparatus for controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive  
5 time slots each having a plurality of data bits and the AT receives the data packet from the AN, the method comprising:

a device for comparing a received C/I of a forward pilot signal received from the AN with a predetermined threshold; and

a device for transmitting a signal requesting termination of  
10 retransmission of the data packet to the AN if the received power is less than the threshold.

45. The apparatus of claim 44, wherein the comparator detects the length of the data preamble of the received time slot, determines whether that is  
15 the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

46. The apparatus as claimed in either of claims 44 or 45, wherein the  
20 threshold is calculated by multiplying a received C/I corresponding to a current data rate by the maximum number of data packet transmissions, subtracting a predetermined margin from the product, and multiplying the difference by a ratio of the number of already transmitted slots to the total number of slots transmittable for the data packet.

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47. An apparatus for controlling transmission of a data packet from an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet

from the AN, the apparatus comprising:

a device for comparing a received C/I of a forward pilot signal received from the AN with a predetermined first threshold;

a device for determining a data rate corresponding to the received power

5 if the received power is less than or equal to the first threshold; and

a device for requesting retransmission of the data packet to the AN by transmitting the determined data rate to the AN.

48. The apparatus of claim 47, wherein the comparator detects the  
10 length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

15 49. The apparatus of claim 47, further comprising:

a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold;

a device for determining the data rate corresponding to the received power if the received power is equal to or greater than the second threshold; and

20 a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN.

50. The apparatus of any of claims 47 to 49, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of  
25 the current data packet as many times as the maximum number of data packet transmissions.

51. The apparatus of claim 49, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a

predetermined margin and multiplying the number of already transmitted slots for the current data packet.

52. An apparatus for controlling transmission of a data packet from  
5 an access network (AN) in an access terminal (AT) of a mobile telecommunication system where the AN transmits the data packet in successive time slots each having a plurality of data bits and the AT receives the data packet from the AN, the apparatus comprising:

a device for comparing a received C/I of a forward pilot signal received  
10 from the AN with a predetermined first threshold; and

a device for requesting retransmission of the data packet by transmitting the determined data rate to the AN if the received power is equal to or less than the first threshold.

53. The apparatus of claim 52, wherein the comparator detects the  
15 length of the data preamble of the received time slot, determines whether that is the low data rate and performs the comparison if the determined data rate is a low data rate, wherein the low data rate repeatedly transmits the same data packet two times or more.

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54. The apparatus of claim 52, further comprising:

a device for comparing the received power with a predetermined second threshold if the received power is equal to or less than the first threshold; and

a device for requesting retransmission of the data packet to the AN if the  
25 received power is equal to or greater than the second threshold.

55. The apparatus of any of claims 52 to 54, wherein the first threshold is calculated by accumulating a C/I corresponding to the data rate of the current data packet as many times as the maximum number of data packet

transmissions.

56. The apparatus of claim 54, wherein the second threshold is calculated by dividing the required C/I corresponding to a current data rate by a predetermined margin and multiplying the number of already transmitted slots  
5 for the current data packet.